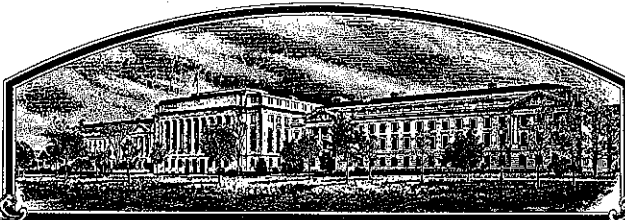


No.

9500288



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Georgia Research Foundation, Inc. (UGARF) and
University of Florida Agricultural Experiment Station (UF AES)

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Morey'



Attest:

Marsha A. Stanton
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-ninth day of December in the year of our Lord one thousand nine hundred and ninety-five.

Samuel J. Hittman
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)


1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) University of Georgia Research Foundation, Inc. (UGARF) and University of Florida Agricultural Experiment Station (UFAES)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER 85238C5-AB5-4	3. VARIETY NAME Morey
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Boyd Graduate Studies Research Center, 6th Floor D.W. Brooks Drive Athens, GA 30602-7411		5. TELEPHONE (include area code) (706) 542-5929	FOR OFFICIAL USE ONLY PVPO NUMBER 9500288 DATE AUGUST 31, 1995 FILING AND EXAMINATION FEE: 2450.00 DATE AUGUST 31, 1995 CERTIFICATION FEE: 300.00 DATE NOVEMBER 17, 1995
		6. FAX (include area code) (706) 542-5638	
7. GENUS AND SPECIES NAME Triticum aestivum	8. FAMILY NAME (Botanical) Gramineae		
9. CROP KIND NAME (Common name) Wheat, common			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) Corporation (UGARF) and University			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Georgia (UGARF)		12. DATE OF INCORPORATION November 17, 1978	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Janice A. Kimpel University of Georgia Research Foundation, Inc. Boyd Graduate Studies Research Center, 6th Floor Athens, GA 30602-7411			14. TELEPHONE (include area code) (706) 542-5929
			15. FAX (include area code) (706) 542-5638
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act?) <input checked="" type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES (If "yes," give names of countries and dates) <input type="checkbox"/> NO U.S. 10/13/94			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) Joe L. Key		NAME (Please print or type)	
CAPACITY OR TITLE Executive Vice President	DATE 8/15/95	CAPACITY OR TITLE	DATE

Exhibit A

Origin and Breeding History of Morey

'Morey', a soft red winter wheat (Triticum aestivum L.), was cooperatively developed and released by the Georgia and Florida Agricultural Experiment Stations in 1994. Morey was derived from a single cross made in 1985 at the University of Florida: FL8172-G116/'Florida 303'. FL8172-G116 is a sister line to 'FL 304'. It was named to honor Dr. D. D. Morey, the former wheat breeder at the Coastal Plain Station, Tifton. The cultivar was developed using a modified pedigree method of breeding. Morey was tested experimentally as GA 85238-C5-AB5-4. Summer nursery in 1987 was used to obtain an advance generation. Individual spike selections were made for leaf rust, powdery mildew, and Hessian fly resistance and agronomic traits in the F₃, F₄, and F₅ generations at Tifton, GA. Morey was selected as an F₅ headrow in 1990. Morey was evaluated for agronomic performance as GA 85238-C5-AB5-4 in nursery plots in 1991 (1 rep at two locations), in Georgia's and Florida's state trials at six locations in 1992 and 1993, and in the Uniform Southern Soft Red Winter Wheat Nursery at about 30 locations in 1992 and 1993. Breeder seed, produced in 1994, is in the F11.

Morey is early maturing, soft red winter wheat. It is a medium height at maturity, white-chaffed, awned, and characterized by good straw strength with high yield potential. During 2 yr (5 locations yr⁻¹) in Georgia, Morey, 'Andy', and 'FL 304' yielded an average of 3531, 3424, and 3524 kg/ha⁻¹, respectively. It is about 6 days earlier in maturity and 8 cm shorter than Florida 304, and has excellent lodging resistance. Milling and baking quality characteristics of Morey are rated acceptable for soft red winter wheat use by the USDA-Soft Wheat Quality Laboratory, Wooster, Ohio.

Morey is resistant to the biotypes of Hessian fly (Mayetiola destructor (Say)) present in Georgia and Florida, and resistant to current races of leaf rust caused by Puccinia recondita (Rob. ex Desm.), and powdery mildew caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal.

The cultivar has been observed for six generations in the field. It has proven to be uniform and stable, showing less than 1% of the plants as off type plants. An occasional awnless plant may be observed.

Off type = variant for letters 10/31/95 MAF

Breeder seed of Morey will be maintained by the Georgia Agricultural Experiment Station, The University of Georgia, Georgia Station, Griffin, GA 30223-1797.

Exhibit B

Novelty Statement

Morey is a soft red winter wheat, awned and white chaffed. It is most similar in appearance, to Florida 303, but differs in that it is resistant to biotypes GP and E of Hessian fly, whereas Florida 303 is susceptible to biotypes GP and E. Morey is resistant to all 6 leaf rust races in a differential set (TDBL, LBBQ, PBMG, THBL, TLGG, AND TEBL), whereas Florida 303 is susceptible to 4 races (TDBL, LBBQ, PBMG, and THBL) out of six. Morey expresses resistant to stem rust races (QSHS, TNMH, TNMK), whereas Florida 303 is susceptible to these races (QSHS, TNMK, TNMH).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
COMMODITIES SCIENTIFIC SUPPORT DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT: University of Georgia Research Foundation, Inc. and University of Florida Agricultural Experiment Station

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

Boyd Graduate Studies Research Center, 6th Floor

D.W. Brooks Drive

Athens, Georgia 30602-7411

FOR OFFICIAL USE ONLY

PVPO NUMBER

9500288

VARIETY NAME OR TEMPORARY DESIGNATION

MOREY

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g., 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. KIND:

1 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

2 1 = SPRING 2 = WINTER 3 = OTHER (Specify) 1 1 = SOFT 2 = HARD 3 = OTHER (Specify)

2 1 = WHITE 2 = RED 3 = OTHER (Specify)

Per letter
of 10-3-95
MAH
10/27/95

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

1 3 1 FIRST FLOWERING 1 3 6 LAST FLOWERING

4. MATURITY (50% Flowering):

NO. OF DAYS EARLIER THAN 1 = ARTHUR 2 = SCOUT 3 = CHRIS

0 1 NO. OF DAYS LATER THAN 7 4 = LEMHI 5 = NUGAINE 6 = LEEDS 7 = FL303

5. PLANT HEIGHT (From soil level to top of head):

0 8 8 CM. HIGH

CM. TALLER THAN 7 = FL303

0 1 CM. SHORTER THAN 7 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINE 6 = LEEDS

6. PLANT COLOR AT BOOTING (See reverse):

2 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTER COLOR:

1 1 = YELLOW 2 = PURPLE

8. STEM:

2 Anthocyanin: 1 = ABSENT 2 = PRESENT

2 Waxy bloom: 1 = ABSENT 2 = PRESENT

1 Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

1 Internodes: 1 = HOLLOW 2 = SOLID

NO. OF NODES (Originating from node above ground)

CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

1 Anthocyanin: 1 = ABSENT 2 = PRESENT

1 Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

2 Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (Specify)

1 Flag leaf: 1 = NOT TWISTED 2 = TWISTED

1 Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

2 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

1 6 MM. LEAF WIDTH (First leaf below flag leaf)

2 1 CM. LEAF LENGTH (First leaf below flag leaf)

9500288

11. HEAD:

☒ 3 Density: 1 = LAX 2 = DENSE 3 = mid-dense ☒ 1 Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE
4 = OTHER (Specify) _____

☒ 4 Awedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNE

☒ 1 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED
5 = BROWN 6 = BLACK 7 = OTHER (Specify): _____

☒ 0 ☒ 9 CM. LENGTH. ☒ 1 ☒ 1 MM. WIDTH

RECEIVED
USDA-AMS-PVPO

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12. GLUMES AT MATURITY:

☒ 2 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.)
☒ 2 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

☒ 2 Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE
☒ 3 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

☐ 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

☐ 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

☒ 2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

☒ 1 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL ☒ 1 Check: 1 = ROUNDED 2 = ANGULAR

☒ 1 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG ☒ 1 Brush: 1 = NOT COLLARED 2 = COLLARED

☐ Phenol reaction (See Instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

☒ 3 Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) _____

☒ 0 ☒ 7 MM. LENGTH ☒ 0 ☒ 3 MM. WIDTH ☒ 3 ☒ 6 GM. PER 1000 SEEDS

17. SEED CREASE:

☒ 1 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'
☒ 3 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☒ 2 STEM RUST (Race) QSHS, TNMK, ☒ 2 LEAF RUST (Race) TDBL, LBBQ, ☒ 0 STRIPE RUST (Race) ☒ 0 LOOSE SMUT
TNMH TLGG, TEBL

☒ 2 POWDERY MILDEW ☒ 0 BUNT ☐ OTHER (Specify) _____

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☒ 0 SAWFLY ☒ 0 APHID (Bydv.) ☒ 0 GREEN BUG ☒ 0 CEREAL LEAF BEETLE

☐ OTHER (Specify) _____ HESSIAN FLY RACES: ☒ 2 GP ☒ 0 A ☒ 1 B ☒ 1 C
☒ 1 D ☒ 2 E ☒ 0 F ☒ 0 G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Florida 303	Seed size	Florida 303
Leaf size	Florida 303	Seed shape	Florida 303
Leaf color	Florida 303	Coleoptile elongation	
Leaf carriage	Florida 303	Seedling pigmentation	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- L.W. Briggles and L. P. Reitz, 1963, *Classification of Triticum Species and Wheat Varieties Grown in the United States*, Technical Bulletin 1278, United States Department of Agriculture.
- W.E. Walls, 1965, *A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity*, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

Exhibit D

Additional Description of Morey

Morey is a common soft red winter wheat, *Triticum aestivum* L., developed jointly by Jerry W. Johnson and Philip Bruckner at The University of Georgia, Georgia Agricultural Experiment Stations, and Ron D. Barnett at the University of Florida, Institute of Food and Agricultural Sciences, Florida Agricultural Experiment Station.

Morey is early maturing and medium in height at maturity. It has excellent resistance to leaf rust, stem rust and powdery mildew. Additional information is presented in Tables 1-18 attached to this Exhibit.

ADDENDUM TO EXHIBIT D. PVP APPLICATION NO. 9500288 (WHEAT) CV. "MOREY"

PAGE 1

ADVANCED NURSERY EVALUATION

FOR SOFT WHEAT MILLING AND BAKING QUALITY

1992 CROP

UNIFORM SOUTHERN NURSERY
(SOUTH)

STD - #1702, SALUDA

ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	MICRO T.W. LB/BU	SOFT. EQUIV.	FLOUR YIELD	FLOUR PROT.	MICRO AWRC	COOKIE TOP DIAM. GR.	
STANDARD	100.0 A	100.0 A	100.0 A	58.1	57.4	69.4	8.73	60.5	17.1	2
BENCHMARK	108.9 A	110.0 A	108.9 A	61.0	61.4	75.1	7.87	52.9	18	7
1701 1 FLORIDA 182	103.7 A	96.8 B	96.8 B	56.3 Q	56.6	70.9	8.79	57.1	16.8	3
1702 2 SALUDA	100.0 A	100.0 A	100.0 A	58.1	57.4	69.4	8.73	60.5	17.1	2
1703 3 COKE 9835	107.4 A	102.0 A	102.0 A	59.3	60.3	71.2	7.69	52.8	17.4	4
1704 4 AR264132	91.5 C	97.0 B	91.5 C	58.6	53.8	67.8	9.24	60.2	17.1	3
1705 5 AR264133	96.8 B	107.4 A	96.8 B	54.0 Q	59.1	68.8	8.94	60.2	17.8	6
1706 6 SC50236	100.2 A	92.6 C	92.6 C	58.6	55.5	69.7	8.76	60.9	16.9	5
1707 7 AL881060	100.5 A	101.9 A	100.5 A	58.7	51.7	70.4	9.23	55.1	17.6	7
1708 8 MD50004-52	95.5 B	50.4 F	50.4 F	59.7	41.6 Q	70.9 Q	8.44	52.3	15.8 Q	1
1709 → 9 GA85238-CS-AB5-4	81.0 B	81.1 B	81.0 B	56.0 Q	52.5	68.7	9.78	59.5	16.3 Q	1
1710 10 GA85238-CS-AB3-3	92.0 C	85.3 D	85.3 D	56.9	50.3	68.2	9.68	59.9	16.5 Q	2
1711 11 GA83125-CS221	99.6 B	98.1 B	98.1 B	60.8	47.7 Q	71.7	9.55	56.9	17.5	4
1712 12 GA83228-1	89.5 D	88.8 D	88.8 D	57.1	54.3	67.4	8.97	51.8	16.8	2
1713 13 TX85-264	95.9 B	92.2 C	92.2 C	55.5 Q	60.3	68.2	8.54	65.7 Q	17.2	3
1714 14 AB186D-1903	106.9 A	105.5 A	106.9 A	59.4	59.5	71.1	8.04	58.7	17.9	6
1715 15 SC570196	96.0 B	97.5 B	96.0 B	58.6	52.3	69.2	10.06	57.4	17.1	2
1716 16 MD80071-56	95.7 B	99.6 B	95.7 B	59.4	53.7	68.8	8.78	59.9	17.1	3
1717 17 TN84-613	102.2 A	105.5 A	102.2 A	57.4	58.7	69.8	8.86	60.8	17.7	5
1718 18 TN85-455	52.6 F	103.1 A	52.6 F	60.7	53.1	58.1	9.12	57.6	17.3	3
1719 19 TX86-106H	104.5 A	107.4 A	104.5 A	57.1	57.3	70.7 Q	8.65	58.6	17.6	4
1720 20 TX82-11	102.3 A	106.0 A	102.3 A	57.5	55.9	70.3	8.24	57.2	17.9	6
1721 21 TX89D2148	103.9 A	108.1 A	103.9 A	58.7	58.8	70.1	8.56	59.7	17.5	4
1722 22 TX89D6435	83.8 E	64.8 F	64.8 F	53.5 Q	53.6	66.5	10.08	65.8 Q	16.2 Q	0
1723 23 GA84438	102.1 A	100.6 A	100.6 A	59.4	53.7	70.4	8.89	58.2	17.1	3
1724 24 GA831127	103.7 A	110.0 A	103.7 A	59.7	60.4	69.7	8.17	58.1	17.4	5
1725 25 VA90-52-26	86.0 D	71.8 F	71.8 F	58.0	46.3 Q	67.7	8.85	61.9	16.5 Q	2
1726 26 VA90-52-52	100.8 A	101.5 A	100.8 A	59.5	58.3	69.3 Q	8.91	60.5	17.1	2
1727 27 AB190-8369	92.9 C	59.4 B	92.9 C	57.8	49.2 Q	69.0	8.92	57.6	17.3	5
1728 28 AB190-8050	103.8 A	105.6 A	103.8 A	58.2	55.5	71.5	9.56	56.5	17.5	5
1729 29 AB190-8284	101.8 A	102.7 A	101.8 A	59.1	52.5	70.5	8.36	55.6	17.6	5
1730 30 LS50682	104.9 A	104.2 A	104.2 A	59.6	57.4	70.5 Q	8.59	59.2	17.1	4

← CV. "MOREY"

1020

Table 1. Average yield performance of GA 85238 and check cultivars in South Georgia's evaluation trials over 3 years (1992-1994) at 3 locations.

Entry	Location			Average
	Tifton	Plains	Midville	
GA 85238	49.5a*	62.9a	61.5b	58.0a
GA 83228	48.5a	63.7a	62.8ab	58.4a
GA Andy	47.2a	64.3a	67.0a	59.5a

Table 2. Average yield performance of GA 85238 and check cultivars in North Georgia's evaluation trials over 2 years (1993-1994) at 2 locations and Statewide.

Entry	Location		Average	Statewide
	Griffin	Calhoun		
Ga 85238	79.4b	61.0a	70.2a	59.5a
GA 83228	88.1a	59.4a	73.8a	60.7a
GA Andy	85.8a	63.9a	74.8a	62.6a

*, See Table 1.

Table 3. Agronomic characteristics of Morey and selected cultivars over 2 years (1993 and 1994) at 3 locations.

95 AUG 31 P3:1

Entry	Test Wt. ¹	Lodging ²	Date ³ Headed	Leaf ³ Rust	Hessian fly ⁴	
	lb/bu				%	no.
GA 85238	55.4	18a	4/3	0a	1.1a	0.01a
GA 83228	55.5	24a	4/4	1a	0.0a	0.0a
GA Andy	55.7	12a	4/3	5b	0.0a	0.0a

¹ Average of Tifton, Plains, and Midville

² Average of Tifton, Plains, and Calhoun

³ Average of Tifton, Plains, Griffin, and Calhoun

⁴ % infested tillers, Plains

⁴ Hessian flies per tiller, Plains

Table 4. Seedling reaction of GA 83228-1 (Stuckey) and GA 85238-C5-AB5-4 (Morey) as tested by USDA-ARS Rust Lab (1991-92).

	Reactions Produced By Race						FBRG	LBGQ	TDBL	SCDB	Postulated seedling Lr Genes
	LBGB	JCDB	TCGG	TFGL	PLML	TBGL					
GA 85238	;	;	;	;	;	;	;	;	;	;	R**
GA 83228	3	3;	3;	3;	3	3	3	3	3	3	+
FL 302	;	;	;	3	3	3	;	3	3	;	10+

; = Hypersensitive fleck, proof of infection and resistance

3 = Susceptible reaction

** + = Lr gene(s) present but unable to identify with these Lr virulence combinations; R = resistant

0020

Table 5. Seedling reaction of GA 83228-1 (Stuckey) and GA 85238-C5-AB5-4 (Morey) as tested by USDA-ARS Rust Lab (1992-93).

	Reactions Produced By Race										Postulated seedling Lr Genes
	TBGL	BGDL	MCBL	TDBL	PBMG	TLGG	TDJQ	TFBL	LBBQ	PQM	
GA 85238	;	;	;	;	;	;	;	;1C	;	;	+ ^{**}
GA 83228	3	3	3	3	3	3	3	3	3	3	0
FL 302	3	3	3	3	;1C	;	3	3	3	3	10

; = Hypersensitive fleck, proof of infection and resistance

3 = Susceptible reaction

** + = Lr gene(s) present but unable to identify with these Lr virulence combinations; 0 = no gene(s) detected with these Lr virulence combinations

Test 6. Seeding reaction of GA 83228-1 (Stuckey) and GA 85238-C5-AB5-4 (Morey) to selected isolates of stem rust as tested by USDA-ARS Rust Lab (1992-93).

	Isolates							Sr gene
	QFBS	QSHS	RKQS	RPQQ	RTQQ	TNMH	TNMK	
GA 85238	;1	2=	0;	0	0;	2=	2=	10,24
GA 83228	0	0	0	0;	0	0	;1	6,17,36
FL 302	;1	5	1N	0	1N	0;	0	6,10
Saluda	5	5	5	5	5	5	5	None

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Table 7. Adult plant reaction of GA 83228-1 (Stuckey) and GA 85238-C5-AB5-4 (Morey) grown at St. Paul, MN to leaf and stem rust (Rust Lab, USDA-ARS).

	<u>Leaf Rust</u>	<u>Stem Rust</u>
	TR	TR-MR
GA 85238 (Morey)		
Ga 83228 (Stuckey)	TR	10 MS-S
FL 302	5S	20 MS-S
Saluda	30S	40S

Table 8. Reaction of GA 83228-1 (Stuckey) and GA 85238-C5-AB5-4 (Morey) to 6 biotypes of Hessian fly (1992-93), USDA,ARS, West Lafayette, IN.

	<u>Biotypes</u>					
	GP	E	L	D	B	C
GA 85238	14-0	11-0	0-16	0-13	0-17	0-15
GA 83228	16-0	0-13	0-13	0-14	0-18	19-0
FL 302	0-13	0-11	0-16	0-18	0-15	0-17
Saluda	13-1	9-4	0-15	0-15	0-16	0-15

Table 9. Performance of Morey and selected entries at Marianna, Florida in 1992.

Entry	Yield	Test weight	Powdery mildew ¹	Heading date	Plant height
	Bu/A	lbs/bu			inches
Coker 9835	88.9	55.5	5	4-12	38
Morey	80.0	54.6	1	3-31	42
FL 304	76.0	54.7	2	4-14	43
FL 302	72.0	53.6	7	4-13	41
LSD (.05)	13.8				

¹0-9 scale with 9 = heavily diseased and 0 = no disease.

Table 10. Performance of Morey and selected entries at Quincy, Florida in 1992 in an advanced yield trial.

Entry	Yield	Test weight	Powdery mildew	Heading date	Plant height	Lodging
	Bu/A	lbs/bu			inches	%
Coker 9835	74.4	60.8	2.8	4-2	38	0
GA-Gore	68.1	62.4	1.5	4-4	39	0
FL 304	64.9	61.9	4.0	4-5	44	1
Morey	64.2	59.8	1.0	3-22	41	0
FL 303	61.9	61.3	2.8	3-21	41	1
FL 302	60.4	61.1	4.0	4-3	43	6
LSD (.05)	7.3					

¹0-9 scale with 9 = heavily diseased and 0 = no disease.

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Table 11. Performance of Morey and selected entries at Quincy, Florida in 1992 in a uniform yield trial.

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Entry	Yield	Test weight	Powdery mildew	Heading date	Plant height
	Bu/A	lbs/bu			inches
Coker 9835	73.3	60.1	2	3-31	36
Morey	68.4	59.5	0	3-19	40
FL 304	61.3	61.1	0	4-3	44
FL 302	58.7	59.1	3	4-3	44
LSD (.05)	10.2				

¹0-9 scale with 9 = heavily diseased and 0 = no disease.

Table 12. Performance of Morey and selected entries at Marianna, Florida in 1993.

Entry	Yield	Test weight	Plant height	Leaf rust ¹
	bu/A	lbs/bu	inches	
Savannah	48.2	57.5	29	MR
FL 304	44.8	57.2	36	R
Coker 9835	42.4	55.5	28	MS
Morey	35.2	52.4	34	R
FL 302	26.2	53.3	34	S
LSD (.05)	6.3			

¹ Rust ratings based on R = Resistant, MR = moderately resistant. MS = moderately susceptible and S = susceptible disease reaction.

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Table 13. Performance of Morey and selected entries at Quincy, Florida in 1993.

Entry	Yield	Test weight	Powdery mildew	Leaf rust % ²	Plant height
	Bu/A	lbs/bu		reaction	inches
Morey	56.6	55.7	1	0	36
Savannah	56.4	59.7	2	5MR	35
Coker 9835	55.9	58.1	3	20MR	30
FL 302	41.1	56.0	6	70S	34
FL 304	40.1	58.0	3	0	34
LSD (.05)	6.4				

¹ 0-9 scale with 9 = heavily diseased and 0 = no disease.

² Rust ratings based on percent of leaf tissue diseased and R = resistant, MR = moderately resistant, MS = moderately susceptible, and S = susceptible disease reaction.

Table 14. Performance of Morey and selected entries at Marianna, Florida in 1994.

Entry	Yield	Test weight	Plant height	Heading date
	bu/A	lbs/bu	inches	
Coker 9835	66.7	55.2	32	3-26
GA-Andy	59.1	57.9	36	3-16
Morey	58.7	55.7	35	3-19
FL 302	58.7	56.0	38	3-28
FL 304	58.6	57.2	37	3-24
Coker 9766	54.9	54.9	35	3-28
GA-Gore	54.4	56.0	34	3-26
Savannah	52.3	57.3	34	3-22
LSD (.05)	7.3			
C.V.	9.3%			

Table 15. Performance of Morey and selected entries at Quincy, Florida in 1994.

Entry	Yield bu/A	Test weight lbs/bu	Plant height inches	'95 AUG 31 Lodging %	P 3:1 Heading
Coker 9835	66.1	55.6	36	47	3-26
GA-Andy	51.9	58.0	36	25	3-17
Coker 9766	48.7	53.4	38	58	3-28
GA-Gore	44.8	54.9	36	65	3-24
Morey	44.0	56.7	36	25	3-20
FL 304	43.1	56.4	36	35	3-26
Savannah	41.6	56.7	38	62	3-22
FL 302	34.3	54.6	36	62	3-27
LSD (.05)	9.2		4	26	
C.V.	11.5%				

Table 16. Average performance of GA 85238 and three cultivars in the Uniform Southern Wheat Nursery (20 locations in 1993).

Entry	Grain Yield (Bu/A)	Test Wt. (lbs/bu)	Date Headed	Powdery Mildew ¹	Leaf Rust ²
GA 85238	58.6b	54.2	105.8	1a	2a
GA 83228	60.5ab	54.9	106.6	0a	1a
FL 302	58.0ab	53.8	109.4	2a	7b
C 9835	66.5a	55.4	109.4	2a	2a

[†] Rated on a leaf area infested (0-9) scale where 0-3 is classified as resistant and 7-9 is susceptible.

^{*} Means followed by the same letter are not significantly different based on a LSD (0.05) level.

¹ Griffin, GA; Florence, SC; and Warsaw, VA.

² Griffin, GA; Baton Rouge, LA; Florence, SC; and Warsaw, VA.

Table 17. Evaluations of GA-Morey and check cultivars for lodging over 2 years (1993-1994)

	1993			1994		
	Tifton	Plains	Calhoun	Tifton	Plains	Calhoun
Ga-Morey	5a	1a	0a	51a	0a	30a
Stuckey	7a	9a	0a	55a	43b	50b
Andy	3a	1a	0a	44a	3a	30a

Table 18.

Seedling reaction of Morey and Florida 303 to selected isolates of Puccinia graminis f. sp. tritici (by D. V. McVey, USDA, ARS, Cereal Rust Lab, University of MN, St. Paul, MN).

<u>Reaction Produced by Isolates</u>				
Entries	QFBS	QSHS	TNMH	TNMK
Morey	;1 ^a	2 =	2 =	2 =
Florida 303	;1N	S	S	S

a See Table 5 for rating definitions.

Seedling reaction of Morey and Florida 303 to selected isolates of Puccinia recondita f. sp. tritici (by P. L. Long, USDA-ARS, Cereal Rust Lab., U. of MN, St. Paul, MN).

<u>Reactions Produced by Isolates</u>						
Entries	TDBL	TLGG	TEBL	LBBQ	PBMG	THBL
Morey	;	;	;1C	;	;	;
Florida 303	3;	;	;	3	3	2

Exhibit E

The variety for which plant variety protection is hereby sought is owned jointly by the University of Georgia Research Foundation, Inc. (UGARF) and the University of Florida Agricultural Experiment Station (UFAES).

Ownership by UGARF in the variety for which plant variety protection is hereby sought is based on the Patent Policy approved by the Board of Regents of the University System of Georgia on June 9, 1982, in which the Board of Regents assigned to The University of Georgia Research Foundation, Inc. all rights in intellectual property developed or created by employees at The University of Georgia, one of the universities of the University System of Georgia. Rights in novel plant varieties developed at The University of Georgia, including "Morey", are covered by said Patent Policy. As employees of The University of Georgia, Jerry W. Johnson and Philip Bruckner, pursuant to said Patent Policy, have assigned their rights in "Morey" to the University of Georgia Research Foundation, Inc.

Ron D. Barnett, as an employee of UFAES' Institute of Food and Agricultural Sciences, has assigned his rights in "Morey" to UFAES.